



UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: JEFFERSON ET AL.

Title: MICROBIAL B-GLUCURONIDASE GENES, GENE PRODUCTION
AND USES THEREOF

Appl. No.: 09/936,759

Filing Date: 09/17/2001

Examiner: Unassigned

Art Unit: Unassigned

7

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR § 1.56

Commissioner for Patents
Box PATENT APPLICATION
Washington, D.C. 20231

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR § 1.56. A copy of each listed document available to Applicants is being submitted to comply with the provisions of 37 CFR §§ 1.97 and 1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR § 1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* prior art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR § 1.97(b), before the mailing date of the first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

The majority of the documents are in the English language. The relevance of the documents are discussed in the instant specification or in the Search Report for PCT/US00/07107 from which the above-captioned application is a National Stage filing under 35 U.S.C. § 371. A copy of the PCT Search Report is attached setting forth the portion of each document considered relevant by the International Search Authority. An English-language counterpart of the foreign-language documents has been provided where readily available. The absence of a translation or an English-language counterpart document does not relieve the PTO from its duty to consider any submitted document (37 CFR § 1.98 and MPEP § 609).

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP § 609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

Date April 26, 2002

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143
Telephone: (202) 672-5483
Facsimile: (202) 672-5399

By Richard C. Peet

for Richard C. Peet
Attorney for Applicant
Registration No. 35,792

410,413

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Date Submitted: April 26, 2002

(use as many sheets as necessary)

Complete if Known

Application Number	09/936,759 (Cont. of PCT/US00/0717 and 09/270,957)
Filing Date	09/17/2001
First Named Inventor	Richard A. JEFFERSON
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	076518-0150

Sheet 1 of 6

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	A1	RE 32,011		Zimmerman	10/22/1985	
	A2	4,115,064		Gindler	09/19/1978	
	A3	4,274,832		Wu	06/23/1981	
	A4	4,298,685		Parikh	11/03/1981	
	A5	4,376,110		David	03/08/1983	
	A6	4,411,993		Gillis	10/25/1983	
	A7	4,450,239		Chatterton	05/22/1984	
	A8	4,473,640		Combie	09/25/1984	
	A9	4,478,936		Herlihy	10/23/1984	
	A10	4,481,195		Rubin	11/06/1984	
	A11	4,486,530		David	12/04/1984	
	A12	4,536,475		Anderson	08/20/1985	
	A13	4,543,439		Frackelton	09/24/1985	
	A14	4,551,433		DeBoer	11/05/1985	
	A15	4,584,368		Rubin	04/22/1986	
	A16	4,588,686		Herlihy	05/13/1986	
	A17	4,736,866		Leder	04/12/1988	
	A18	4,745,051		Smith	05/17/1988	
	A19	4,839,293		Cantor	06/13/1989	
	A20	4,870,009		Evans	09/26/1989	
	A21	4,873,191		Wagner	10/10/1989	
	A22	4,892,833		Weiss	01/09/1990	
	A23	4,902,614		Wakabayashi	02/20/1990	
	A24	4,918,066		Kump	04/17/1990	
	A25	4,939,264		Heiman	07/03/1990	
	A26	4,940,838		Schilperoort	07/10/1990	
	A27	4,945,050		Sanford	07/31/1990	
	A28	5,036,006		Sanford	07/30/1991	
	A29	5,075,340		Barua	12/24/1991	
	A30	5,100,792		Sanford	03/31/1992	
	A31	5,110,833		Mosbach	05/05/1992	
	A32	5,162,215		Bosselman	11/10/1992	
	A33	5,164,180		Payne	11/17/1992	
	A34	5,169,784		Summers	12/08/1992	
	A35	5,187,091		Donovan	02/16/1993	
	A36	5,204,244		Fell	04/20/1993	
	A37	5,206,166		Payne	04/27/1993	
	A38	5,218,104		Hilder	06/08/1993	
	A39	5,225,539		Winter	07/06/1993	
	A40	5,242,687		Tykocinski	09/07/1993	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Date Submitted: April 26, 2002

(use as many sheets as necessary)

Complete if Known

Application Number	09/936,759 (Cont. of PCT/US00/0717 and 09/270,957)
Filing Date	09/17/2001
First Named Inventor	Richard A. JEFFERSON
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	076518-0150

Sheet

2

of

8

& TRADEMARK OFFICE

U.S. PATENT DOCUMENTS

		U.S. Patent Document		
A41	5,243,041		Fernandez-Pol	09/07/1993
A42	5,254,799		De Greve	10/19/1993
A43	5,266,317		Tomalski	11/30/1993
A44	5,268,463		Jefferson	12/07/1993
A45	5,270,200		Sun	12/14/1993
A46	5,288,463		Chemelli	02/22/1994
A47	5,306,863		Hilder	04/26/1994
A48	5,308,760		Brown	05/03/1994
A49	5,317,096		De Greve	05/31/1994
A50	5,328,834		Ngo	07/12/1994
A51	5,328,985		Sano	07/12/1994
A52	5,349,126		Chappell	09/20/1994
A53	5,371,015		Sanford	12/06/1994
A54	5,382,429		Donovan	01/17/1995
A55	5,395,750		Dillon	03/07/1995
A56	5,407,825		Payne	04/18/1995
A57	5,432,081		Jefferson	07/11/1995
A58	5,460,963		Botterman	10/24/1995
A59	5,464,763		Schilperoort	11/07/1995
A60	5,466,597		Peferoen	11/14/1995
A61	5,478,369		Albertsen	12/26/1995
A62	5,482,856		Fell	01/09/1996
A63	5,496,732		Smigocki	03/05/1996
A64	5,501,967		Offringa	03/26/1996
A65	5,545,808		Hew	08/13/1996
A66	5,567,607		Zhao	10/22/1996
A67	5,591,616		Hiei	01/07/1997
A68	5,605,793		Stemmer	02/25/1997
A69	5,612,317		Holick	03/18/1997
A70	5,629,183		Saunders	05/13/1997
A71	5,633,076		DeBoer	05/27/1997
A72	5,639,737		Rubin	06/17/1997
A73	5,691,179		Korsmeyer	11/25/1997
A74	5,693,761		Queen	12/02/1997
A75	5,693,762		Queen	12/02/1997
A76	5,693,769		Kahne	12/02/1997
A77	5,698,435		Robinson	12/16/1997
A78	5,723,323		Kauffman	03/03/1998
A79	5,726,031		Roth	03/10/1998
A80	5,731,179		Komari	03/24/1998
A81	5,733,744		Hamilton	03/31/1998
A82	5,741,957		DeBoer	04/21/1998
A83	5,760,008		Rubin	06/02/1998

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Date Submitted: April 26, 2002

(use as many sheets as necessary)

Complete if Known

Application Number	09/936,759 (Cont. of PCT/US00/0717 and 09/270,957)
Filing Date	09/17/2001
First Named Inventor	Richard A. JEFFERSON
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	076518-0150

Sheet 3 of 6

U.S. PATENT DOCUMENTS

U.S. Patent Document				
A84	5,767,378	Bojsen	06/16/1998	
A85	5,770,380	Hamilton	06/23/1998	
A86	5,780,009	Karatzas	07/14/1998	
A87	5,780,225	Wigler	07/14/1998	
A88	5,840,479	Little	11/24/1998	
A89	5,849,288	Reisner	12/15/1998	
A90	5,854,009	Klug	12/29/1998	
A91	5,994,629	Bojsen	11/30/1999	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	6
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	A92	WO	95/07989		Briggs et al.	03/23/1995		
	A93	WO	95/05743		Rabe et al.	03/02/1995		
	A94	WO	90/11770		Davies et al.	10/18/1990		
	A95	WO	95/29238		Lawrence et al.	11/02/1995		
	A96	WO	95/28478		Ausubel et al.	10/26/1995		
	A97	WO	95/28423		Ausubel et al.	10/26/1995		
	A98	WO	94/18335		Hironaka	08/18/1994		
	A99	WO	96 37609	A				
	A100	WO	99 13085	A				
	A101	WO	89 03880	A	Jefferson	05/05/1989		
	A102	WO	00/08039	A1	Jefferson	02/17/2000		
	A103	EP	0502719	A1	Duvick et al.	09/09/1992		
	A104	EP	0616035	A2	Logemann	09/21/1994		
	A105	EP	392225	A2	Ryals et al.	10/17/1990		
	A106	EP	297944					
	A107	EP	601092					
	A108	JP	7274948					
	A109	JP	4267876					
	A110	JP	4023982					
	A111	JP	6256196					
	A112	JP	43-20631					
	A113	JP	71-32092					
	A114	PCT	US99/17804					
	A115	GB	2197653 A		Jefferson	05/25/1988		

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO
**INFORMATION DISCLOSURE
 STATEMENT BY APPLICANT**

Date Submitted: April 26, 2002

Complete if Known

Application Number	09/936,759 (Cont. of PCT/US00/0717 and 09/270,957)
Filing Date	09/17/2001
First Named Inventor	Richard A. JEFFERSON
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	076518-0150

(use as many sheets as necessary)

Sheet 4 of 6

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A116	Alting-Mees et al., Strategies in Molecular Biology 3:1-9, 1990	
	A117	Altschul et al., Nucleic Acids Res. 25:3389-3402, Oxford University Press, 1997	
	A118	Antibodies: A Laboratory Manual, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press, 1988	
	A119	Antibodies: A Laboratory Manual, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press, 1988	
	A120	Antibodies: A Laboratory Manual, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press, 1988	
	A121	Ausubel et al., Current Protocols in Molecular Biology, Green Publishing, 1987	
	A122	Ausubel et al., supra; Sambrook et al., supra; Methods in Plant Molecular Biology and Biotechnology, Ed. Glick and Thompson, CRC Press, 1993	
	A123	Ausubel, et al., Current Protocols in Molecular Biology, Greene Publishing 1995	
	A124	Bayer and Wilchek J. Chromatogr. 510:3, Elsevier Science Publishing, 1990	
	A125	Bevan, Nucl. Acids. Res. 12:8711, IRL Press Oxford-Washington D.C., 1984	
	A126	Bird et al., Science 242:423-426, 1988	
	A127	Bloch, J. Histochem. Cytochem. 41:1751, 1993	
	A128	Database PIR2 'Online! EMBL Heidelberg, Germany; ID/AC AE001766; Q9X0F2, 4 June 1999 (1999-06-04) NELSON K E ET AL.: "Thermotoga maritima beta-glucuronidase" XP002144985	
	A129	Diamandis and Christopoulos, Clin. Chem. 37:625, 1991	
	A130	Dunn, Methods Mol. Biol. 32:227, Humana Press, 1994	
	A131	Dutton, Glucuronidation of Drugs and Other Compounds, CRC Press, Inc. Boca Raton, FL pp. 13-15	
	A132	Enterobacter/Salmonella, Pseudomonas, Salmonella, Staphylococcus, and Thermotoga (see, TIGR database at www.tigr.org)	
	A133	Eubacteria, Archea, and Eucarya (Woese, Microbiol. Rev. 58: 1-9, 1994)	
	A134	Firck et al., "Endoplasmic reticulum targeting . . ." Transgenic Res. Vol. 3:326-331, April 1994	
	A135	Gene Transfer to Plants, Ed. Potrykus and Spangenberg, Springer, 1995	
	A136	Henrissat B et al., FEBS Lett 27:425, 352-354, Elsevier, 1998	
	A137	Henrissat, Biochem Soc Trans 26:153, 1998	
	A138	Holsters et al., Mol. Gen. Genet. 163: 181-187, Springer Verlag, 1978	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO
**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Date Submitted: April 26, 2002

(use as many sheets as necessary)

Complete if Known

Application Number	09/936,759 (Cont. of PCT/US00/0717 and 09/270,957)
Filing Date	09/17/2001
First Named Inventor	Richard A. JEFFERSON
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	076518-0150

Sheet 5 of 6

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A139	Huse et al., Science 246:1275-1281, American Association for Advancement of Science, 1989	
	A140	Jefferson et al. "Beta Glucuronidase from E-coli as a gene fusion marker", PNAS Vol. 83:8447-8451, Nov. 1986	
	A141	Khasarov et al., "Determination of minimal length DNA . . ." Genehka (Russia) Vol. 28(7) 38-45, July 1992	
	A142	Levy and Conchie, 1966	
	A143	Maidak et al., Nucl. Acids Res. 27:171-173, 1999	
	A144	Mariani et al, Nature 347:737, 1990	
	A145	Nelson et al., "Evidence for lateral gene transfer between Archaea and Bacteria . . ." Nature, 399: 323-329, 1999	
	A146	Nelson et al., "Thermotoga maritime beta-glucuronidase . . ." Database PIR2 'Online' EMBL, Heidelberg, Germany, ID/AC AE001766; Q9X0F2, 4 June 1999, nucleotides 4542 to 6233	
	A147	Novel and Novel, Nol. Gen. Genet. 120:319-335, 1973	
	A148	Ribosomal Database Project of Michigan State University, dpwww.life.uiuc.edu	
	A149	Richards, Methods Enzymol. 184:3, Academic Press, Inc. 1990	
	A150	Russel et al, "Identification and Cloning of gusA . . ." Applied and Environmental Microbiology 67: 1253-1261, 2001	
	A151	Sakaguchi et al., "Beta Glucuronidase . . ." Zentralblatt Bakteriell. Mikrobiol. Ser. A. Vol. 257(3) 308-316, March 1984	
	A152	Sambrook et al. Molecular Cloning: A Laboratory Manual, 2 nd ed., Cold Spring Harbor Press, 1987	
	A153	Sambrook et al., Molecular Cloning: A Laboratory Manual, Cold Spring Harbor Press, 1989	
	A154	Sastry et al., Proc. Natl. Acad. Sci. USA 86:5728-5732, 1989	
	A155	Scatchard, Ann. N.Y. Acad. Sci. 51:660-672, 1949	
	A156	Strunk et al., Electrophoresis 19: 554, 1998	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Date Submitted: April 26, 2002

(use as many sheets as necessary)

Complete if Known

Application Number	09/936,759 (Cont. of PCT/US00/0717 and 09/270,957)
Filing Date	09/17/2001
First Named Inventor	Richard A. JEFFERSON
Group Art Unit	Unassigned
Examiner Name	Unassigned

Sheet

6

of

6

Attorney Docket Number

076518-0150

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A157	Tapsall et al., "Beta Glucuronidase . . ." Daign. Microbiol. Infect. Dis. Vol. 22:261-266, 1995	
	A158	Tomasic and Keglevic, Biochem J 133:789, 1973	
	A159	Von Heijne, J. Mol. Biol. 184:99-105, 1985	
	A160	Wilchek and Bayer, Methods Enzymol. 184:14, Academic Press Inc., 1990	
	A161	Wilchek and Bayer, Methods Enzymol. 184:467, Academic Press Inc., 1990	
	A162	Wilson et al, "The Escherichia coli gus operon: induction and expression of the gus operon in E. coli and the occurrence and use of GUS in other bacteria" 1992, page 7-22, XP 002093517	
	A163	Wilson, K. J. et al., "The Escherichia coli gus operon: induction and expression in E. coli and the occurrence and use of GUS in other bacteria" GUS Protocols: Using the Gus Gene as a Reporter of Gene Expression, 1992, pp. 7-22, XP002093517	
	A164	Wong et al. J. Biol Chem. 18: 34057, American Society for BioChemistry and Molecular Biology, 1998	
	A165	Wilcheck and Bayer, Methods Enzymol. 184:4, Academic Press, 1990	
	A166	Sakaguchi et al, "Beta Glucorinadase...Zentrallbat Bakteriol.Mikrobiol.Ser.A. Vol.257(3) 308-316, March 1984	
	A167	Wolf, Monika Genes Encoding Xylan and B-Glucan Hydrolysing Enzymes in Bacillus Subtilis; Characterization; Mapping and Construction of Strains Deficient in Lichenase, Cellulas and Xylanase, 1995 Microbiology, Vol. 141. Pp. 281-290	
	A168	Yonging, Chen Molecular Cloning and Expression of Bacillus Subtilis bglS Gene in Saccharomyces cerevisiae. Current Microbiology Vol. 25 (1992) pp. 279-282	
	A169	Khasanov, Fuat K. Homologous Recombination Between Plasmid And Chromosomal DNA in Bacillus Subtilis Requires Approximately 70 Bp Of Homology. Molecular & General Genetics Vol. 234 (1992) pp. 494-497	
	A170	Ludwig, C. Bacterial Phylogeny Based on Comparative Sequence Analysis Electrophoresis 19:554-568 Wiley-VCH Verlag Weinheim Germany 1998	
	A171	Woese, C. There Must Be a Prokaryote Somewhere: Microbiology's Search for Itself Microbiological Reviews Vol. 58:1:1-9 American Society for Microbiology 1994	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.